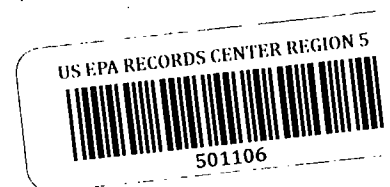




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590



REPLY TO THE ATTENTION OF:  
MCC-10J

MAY 05 2011

Mindy Gould  
SulTRAC, JV  
1 South Wacker Drive, 37<sup>th</sup> Floor  
Chicago, IL 60606

Subject: Contract Number: EP-S5-06-02  
Work Assignment Number: 021-ROBE-051C, Rev. 007

Dear Ms. Mindy Gould:

Enclosed you will find one copy of a work assignment form for the above referenced work assignment. Please acknowledge receipt and acceptance of this work assignment revision by signing and returning a copy of this letter.

If you have any questions or need more information regarding this matter, please feel free to contact me at (312) 353-4656.

Sincerely,

Krista Heartwell  
Contract Specialist

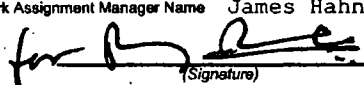
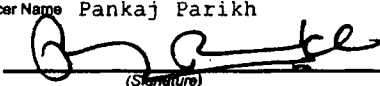
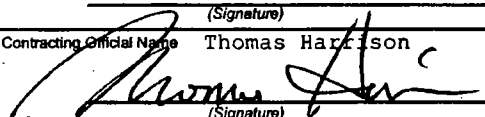
Enclosures

Acknowledgement and Acceptance:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>		Work Assignment Number 021-ROBE-051C <input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <span style="font-size: 1.2em;">007</span>								
Contract Number EP-S5-06-02	Contract Period 06/29/2006 To 06/28/2011 Base <input checked="" type="checkbox"/> Option Period Number	Title of Work Assignment/SF Site Name North Bronson Industrial Area								
Contractor SULTRAC, JV		Specify Section and paragraph of Contract SOW RD Oversight								
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval		Period of Performance From 03/01/2007 To 06/28/2011								
Comments: This action decreases expenditure limits in LOE. The contractor shall submit a work plan and budget for the option WA #121-ROBE-051C effective June 29, 2011. At the close of business on June 28, 2011, the contractor shall stop all technical work and submit a WACR no later than September 28, 2011.										
<input checked="" type="checkbox"/> Superfund    Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
SFO (Max 2) <input type="checkbox"/> Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1							100000			
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
06/29/2006 To 06/28/2011		\$100,000.00		1,121						
This Action:		\$0.00		-500						
Total:		\$100,000.00		621						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:		Cost/Fee:		LOE:						
05/03/2011		\$148,076.00		1,661						
Cumulative Approved:		Cost/Fee:		LOE:						
		\$99,460.00		621						
Work Assignment Manager Name James Hahnenberg <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">             (Signature)         </div> <div style="text-align: center;">           5/4/11            (Date)         </div> </div>							Branch/Mail Code: Phone Number 312-353-4213 FAX Number:			
Project Officer Name Pankaj Parikh <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">             (Signature)         </div> <div style="text-align: center;">           5/4/11            (Date)         </div> </div>							Branch/Mail Code: Phone Number: 312-886-6707 FAX Number: 312-692-2982			
Other Agency Official Name <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">           _____            (Signature)         </div> <div style="text-align: center;">           _____            (Date)         </div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Thomas Harrison <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">             (Signature)         </div> <div style="text-align: center;">           5/5/11            (Date)         </div> </div>							Branch/Mail Code: Phone Number: 312-353-2030 FAX Number:			

**RAC II REGION 5 STATEMENT OF WORK  
FOR REMEDIAL DESIGN OVERSIGHT****North Bronson Industrial Area Superfund Site, Bronson County, Michigan****Effective June 29, 2011****CONTRACT NO: EP-S5-06-02****INTRODUCTION****PURPOSE**

The purpose of this work assignment is to provide oversight of the remedial design (RD) at North Bronson Industrial Area Superfund Site. Contractor oversight under this SOW will continue through planning, implementation, and completion phases of the RD. This statement of work (SOW) sets forth the framework and requirements for the RD Oversight effort. Implementation of the RD will be performed by the potentially responsible parties (PRPs). The record of decision (ROD) issued on June 19, 1998 defines the selected remedy for this site and an Explanation of Significant Difference (ESD) issued September 26, 2008 explains remedy modifications. The RD is designed to achieve the remediation goals specified in the ROD. The primary objective of PRP oversight is to ensure that the remedies specified in the RD and used in the remedial action (RA) protect public health and the environment during the life of the project and are implemented in compliance with the terms of the Settlement Agreement.

**SITE DESCRIPTION**

The North Bronson Industrial Area (NBIA) site, located in Branch County, Bronson, Michigan, consists of two lagoon areas and a county drain which runs adjacent to the lagoons. Several industries in the area discharged plating and other industrial wastes to seepage lagoons between 1939 and 1981. An industrial sewer system was used to transport plating wastes to both sets of lagoons, which were owned and maintained by the city of Bronson. The seepage lagoons are no longer used for waste disposal; however, they contain an estimated 130,000 cubic yards of heavy metal sludges.

The majority of the city of Bronson is within a one-mile radius of the old lagoons at the NBIA site. The area surrounding the site is mixed industrial and residential; north of the site is primarily rural. The majority of the residents in the area of the site are connected to the municipal water supply system, though an estimated 3,000 people within three miles of the site use wells as a source of drinking water. The primary supply wells are located approximately 5,000 feet west of the site and are screened in the upper aquifer.

High levels of trichloroethylene, dichloroethylene, and vinyl chloride (also known as volatile organic compounds or VOCs) as well as elevated levels of heavy metals and cyanide have been detected in private and groundwater monitoring wells in the area. Polychlorinated biphenyls (PCBs) and metals such as cadmium have been found in sediment samples downstream of the old lagoons. Lagoon sludge contains heavy metals, including cadmium, chromium, and lead. Municipal wells are located upgradient of the site with only a remote chance of site contaminants reaching these wells. Accidental ingestion of or direct contact with, the contaminated groundwater, sediment, and sludge could pose a health threat to people.

U.S. EPA issued a Record of Decision (ROD) in June 1998 and an ESD in September 2008. The selected remedy in the ROD includes consolidation of contaminated soils into one area of the western lagoons, dredging sediments from County Drain #30 with consolidation in that area as well, and construction of a wetland to treat groundwater from the lagoon area. Work conducted as part of pre-design studies showed possible problems with the implemen-

tation of the constructed wetland approach for groundwater treatment, and a possible modification of consolidation of lagoons and possible stabilization/solidification. Therefore, EPA issued an ESD, September 26, 2008, providing for significant changes to the remedy described in the ROD. As explained in the ROD and ESD, current cleanup plans cleanup are:

- Possible consolidation of eastern lagoons into western lagoons and soil stabilization/solidification.
- Soil stabilization/solidification of eastern and western lagoons, if kept separate.
- Construct and maintain cover over lagoon areas.
- Fence and mark lagoons with permanent site markers, as needed.
- Provide access controls, as appropriate.
- Place enforceable restrictions on future land use and groundwater use for eastern and western lagoons.
- Dredge sediment from CD#30.
- Monitoring groundwater and surface water to assess the effectiveness of the remedy.

Any modification to the original groundwater remedy selected in the ROD will be addressed through a future ROD amendment.

### **GENERAL REQUIREMENTS**

This is a term-form work assignment that requires the contractor to provide oversight of the RD as specified in the ROD issued on June 19, 1998, and the ESD issued on September 26, 2008, and in accordance with this SOW. The contractor shall furnish all necessary and appropriate personnel, including subcontractors, materials, and services needed for, or incidental to, oversight of the RD. RD Oversight is accomplished by observing and documenting that the PRP has or has not complied with all applicable laws, regulations, and requirements, and has or has not met all performance standards specified in the settlement agreement. The contractor shall document that the PRPs' RD and associated deliverables required under this work assignment are consistent with the settlement agreement, the ROD, the Remedial Design/Remedial Action (RD/RA) Handbook (U.S. EPA Office of Solid Waste and Emergency Response (OSWER) 9355.0-04B, EPA 540/R-95/059, June 1995), and all other guidance used by EPA in conducting an RD (Attachment 2).

In conducting the work assignment, EPA expects the contractor to propose the most appropriate and cost-effective procedures and methodologies using accepted engineering practices and controls. Throughout the performance of this work assignment, EPA expects the contractor to be responsible for performing services and providing products at the lowest reasonable cost.

A summary of the potential major deliverables and proposed schedule for submittals is in Attachment 1. This summary and schedule can be used as the basis for the contractor's proposed deliverables and schedules included in the work plan.

The contractor shall communicate as appropriate with the EPA contracting officer representative (COR), either in face-to-face meetings or through conference calls.

EPA provides oversight of contractor activities throughout the RD oversight. EPA review and approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the environment. EPA also reviews deliverables to assess the likelihood that the RD achieves its goals and that its performance and operations requirements have been met. Acceptance of deliverables by EPA does not relieve the contractor from responsibility for the adequacy of its deliverables or its professional responsibilities.

**RECORD KEEPING REQUIREMENTS**

The contractor shall maintain all technical and financial records for the RD oversight in accordance with the contract. The Agency and the contractor shall endeavor to submit documents and deliverables using electronic media whenever possible. At the completion of the work assignment, submit an official record of the RD Oversight in both compact disk and a hardcopy to the COR.

**US EPA PRIMARY CONTACTS**

The primary contact for this work assignment is James Hahnenberg. He can be reached at 312-353-4213, via facsimile at 312-385-5476 or via e-mail at hahnenberg.james@epa.gov. His mailing address is US EPA Region 5, 77 W. Jackson Blvd., Chicago, IL 60604 (mailcode SR-6J). The secondary contact is Pankaj Parikh. He can be reached at 312-886-6707, via facsimile at 312-692-2982, or via e-mail at pa-rikh.pankaj@epa.gov. His mailing address is US EPA Region 5, 77 W. Jackson Blvd., Chicago, IL 60604 (mailcode SM-5J).

**WORK ASSIGNMENT COMPLETION DATE AND PROJECT CLOSEOUT**

At the completion of the work assignment, perform all necessary project closeout activities as specified in the contract. These activities include closing out any subcontracts, indexing and consolidating project records and files as required above, and providing a technical and financial closeout report to EPA. The goal is to complete work assignment technical activities and closeout activities by December 31, 2013.

**Task 1 - Work Planning and Support**

**Task 1.1 Work Plan** - The contractor shall prepare and submit a RD oversight work plan that includes a detailed description of implementation activities, performance monitoring, and overall management strategy, including optimization, for the RD oversight. Typical activities involved in preparing the work plan include, but are not limited to, the following:

- The contractor shall contact the COR within five calendar days after receipt of the work assignment to schedule the kickoff meeting to be held via teleconference with U.S. EPA Region 5.
- If the RD oversight contractor is unfamiliar with the site, the contractor shall review background documents relevant to the RD Oversight as provided by the COR for purposes of the work plan preparation. Documents to review for background will include the ROD, recent groundwater and soils and sediment data, results of a bench scale treatability study, and pre-design documents related to the constructed wetland component of the remedy.
- If the RD oversight contractor is unfamiliar with the site, the contractor shall conduct a site visit with the COR during the RD oversight planning phase to assist in developing an understanding of the site and any logistics.
- The contractor shall prepare the estimated cost to complete the work assignment, including subcontractor costs, for each element of the SOW; providing a breakdown of the cost by task and subtask levels, in accordance with the contract work breakdown structure (WBS).
- As needed, the contractor shall attend a work plan fact finding/negotiation meeting via teleconfe-

rence with USEPA. The contractor shall prepare and submit a revised work plan incorporating the agreements made in the fact finding/negotiation meeting.

- The contractor shall provide a conflict of interest disclosure.

**Task 1.2 Review PRP Plans** - The contractor shall review and provide comments on the following PRP planning documents including, but not limited to the PRP Health and Safety Plan, Field Sampling Plans (FSPs), and other miscellaneous documents.

**Task 1.3 Preparation of Site-Specific Plans** - The contractor shall review all existing and relevant site-specific plans and prepare, update, and/or maintain plans in accordance with applicable guidance, as necessary for RD oversight implementation.

- Site-specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 29 CFR 1910.120(l)(1) and (l)(2). NOTE: The PRPs' HSP may be adopted for use by the contractor if appropriate.

**Task 1.4 Pollution Liability Insurance** - Not Applicable

**Task 1.5 Project Management and Reporting** - The contractor shall perform activities required to effectively manage the work assignment.

- The contractor shall provide general work assignment management and coordination to implement the work assignment SOW. The contractor shall prepare monthly progress reports in accordance with the requirements under the contract. The contractor shall manage and track costs and prepare and submit invoices. The contractor shall report costs and level of effort (by P-level) for the reporting period as well as cumulative amounts expended to date.
- The contractor shall participate in progress meetings during the course of the work assignment. For budgeting purposes, the contractor shall assume one (1) meeting, with two (2) people in attendance, for four (4) hours. Contractor shall assume that the progress meeting will be held at the site. Assume no overnight stay will be required.
- The contractor shall accommodate any external audit or review mechanism as directed by EPA.
- The contractor shall attend EPA-held training as required.

**Task 1.6 - Subcontractor Procurement and Support Activities** - Not Applicable

### **Task 2 - Community Involvement**

This task includes technical support provided by the contractor during public/availability meeting(s) under the associated community involvement work assignment. The contractor shall provide community involvement support to USEPA throughout the RD oversight in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR Part 300) and the Community Relations in Superfund - A Handbook, (U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0-3C, January 1992. For budgeting purposes the contractor shall assume that the contractor will provide technical support at two (2) public/availability meeting(s) with one (1) contractor personnel in attendance.

**Task 3 - Field Investigation/Data Acquisition – Not Applicable****Task 4 - Sample Analysis – Not Applicable****Task 5 - Analytical Support and Data Validation – Not Applicable****Task 6 - Reuse Planning**

The contractor shall assist in the review and evaluation of reuse plans and redevelopment plans submitted to ensure long-term protectiveness of the RA oversight and remedy. For budgeting purposes, the contractor shall assume 40 hours.

**Task 7 - Data Evaluation – Not Applicable****Task 8 - Review of PRP RD Submittals**

The contractor shall review and provide comments on all documents developed or modified by the PRP during oversight implementation. The contractor shall perform a technical review and generate comments in the form of a technical memorandum. All final decisions regarding submittals by PRPs shall remain the sole responsibility of EPA. Consider the following factors during the review of documents:

- Technical requirements of the ROD, consent decree (CD) with SOW, and ARARs.
- Standard professional engineering practices.
- Applicable statutes, EPA policies, directives, and regulations.
- Spot checking design calculations to assess accuracy and quality of design activities and conformance with results of field data and treatability studies.
- Examination of planning and construction schedules for meeting project completion goals.
- Examination of proposed construction schedule for meeting project completion goals.
- Operability, constructability, and environmental compliance reviews.

The contractor shall review and provide comments on the following documents and the PRP's response to comments if so directed:

- PRP PreDesign Documents.
- Interim Results Deliverables [e.g., Treatability Study Work Results and associated reports]. The contractor shall review and provide comments on any PRP interim design deliverables.
- Other Non-Specific PRP Design Deliverables. The contractor shall budget 80 LOE for this effort.
- Preliminary Design which typically includes the Project Delivery Strategy and Scheduling, Preliminary Construction Schedule, Specifications Outline, Preliminary Drawings Basis of Design Report/Design Analysis, Preliminary Cost Estimate, and PRP Description of Variances with the ROD.

- Intermediate Design Documents which typically includes the Construction Schedule, Preliminary Specifications, Intermediate Drawings, Basis of Design Report/Design Analysis, Revised Cost Estimate, and PRP Description of Variances with the ROD.
- Prefinal Design which typically includes the Prefinal Design Specifications, Prefinal Drawings, Basis of Design Report/Design Analysis, Revised Cost Estimate.
- Final Design which includes Final Design Specifications, Final Drawings, Basis of Design Report/Design Analysis, Final Cost Estimate.
- PRP subcontract award document(s)

#### **Task 9 - Remedial Design Oversight**

The contractor shall provide technical field oversight of PRP activities to ensure the PRP's Treatability Study or Pre-Design field work takes place in accordance with EPA accepted plans and specifications. The amount of oversight will be dependent upon the type and complexity of the Treatability Study or Pre-Design Field Investigation. Typical activities include, but are not limited to, the following:

- Make observations regarding the manner in which the Quality Assurance and Health and Safety Plans are implemented.
- Maintain a field logbook (including photographs as appropriate) which shall be provided to EPA.
- Report any nonconformance issues to the EPA COR.

The contractor shall assume that the PRP RD field oversight will take place over a period of 4 weeks (assumption based on two (2) two-week events). The contractor shall assume 50 hours/week of oversight for each person conducting oversight. It is anticipated that one (1) contractor personnel will be necessary for conducting the oversight. Lastly, the contractor shall provide verbal communications to the RPM at least once per week during the PRP's field work.

- Periodic Reports. The contractor shall provide RD Oversight letter reports once every two (2) weeks during the duration of the PRPs' field work. The contractor's oversight reports shall consist of a short summary of significant field events during the period, any photographs taken during the period, and a copy of all field logs. Each field oversight report shall be submitted 30 calendar days after each two (2) week period and is anticipated to be 3 pages in length on average, plus copies of field logs and photos.

#### **Task 10 - Technical Meeting Support**

The contractor shall attend and document technical meetings with EPA, the PRPs, the PRP contractor, and the State agency. For budgeting purposes the contractor shall assume four (4) meetings. It is anticipated that all the meetings will be held at the site and last approximately half of a day. It is also anticipated that approximately 2 contractor personnel will be in attendance at each of these meetings. Contractor should assume that no overnight stay is required.



**Task 11 - Work Assignment Closeout**

The contractor shall perform the necessary activities to close out the work assignment in accordance with contract requirements. Typical activities include but are not limited to, the following:

- Package and return documents to the government.
- Duplicating/distribution/storage of files.
- Preparation of the Work Assignment Closeout Report (WACR). The contractor shall prepare the WACR in accordance with Regional guidance or other procedures as specified in the work assignment. In those circumstances where the final hours/budget are greater than the +/- 20% of the approved work plan hours/budget, the contractor shall provide an explanation for the underage/overage.

## Attachment 1 - Summary of Major Submittals for the Remedial Design (RD) Oversight North Bronson Industrial Area Superfund Site

DELIVERABLE	NO. OF COPIES	DUE DATE (Calendar Days)
Task 1.1 Remedial Design (RD) Oversight Work Plan	3	30 days after kick-off meeting
Task 1.1 Revised Work Plan	3	15 days after receipt of comments or negotiation meeting
Task 1.1 Conflict of Interest disclosure	3	within five days from acceptance of work assignment
Task 1.2 Comments on PRP Site Management Plan, FSP, HASP, & Contingency Plan	2	21 days after receipt of documents
Task 1.3 Health & Safety Plan	2	30 days after work plan approval
Task 1.5 Monthly Progress Reports	3	As provided for in the Contract
Task 8 Letter Report Summarizing Review of Potentially Responsible Party (PRP) RD Documents	2	21 days after receipt of PRP document from EPA
Task 8 Review of PRP Response to Comments	2	10 days after receipt of PRP response
Task 9 Periodic Reports	2	TBD
Task 11 Work Assignment Completion Report (WACR)	3	45 days after receipt of the Work Assignment Closeout Notification (WACN)
Task 11 Final Costs documented in WACR	3	90 days after receipt of WACN

## Attachment 2 - Regulations and Guidance Documents

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RD process:

1. American National Standards Practices for Respiratory Protection. American National Standards Institute Z88.2-1980, March 11, 1981.
2. ARCS Construction Contract Modification Procedures September 89, OERR Directive 9355.5-01/FS.
3. CERCLA Compliance with Other Laws Manual, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (DRAFT), OSWER Directive No. 9234.1-01 and -02.
4. Community Relations in Superfund — A Handbook, U.S. EPA, Office of Emergency and Remedial Response, January 1992, OSWER Directive No. 9230.0-3C.
5. A Compendium of Superfund Field Operations Methods, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
6. Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, U.S. EPA, Office of Solid Waste and Emergency Response, October 1986, OSWER Directive No. 9472.003.
7. Contractor Requirements for the Control and Security of RCRA Confidential Business Information, March 1984.
8. Data Quality Objectives for Remedial Response Activities, U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
9. Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual, U.S. EPA Region IV, Environmental Services Division, April 1, 1986 (revised periodically).
10. EPA NEIC Policies and Procedures Manual, EPA-330/9-78-001-R, May 1978, revised November 1984.
11. Federal Acquisition Regulation, Washington, DC: U.S. Government Printing Office (revised periodically).
12. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive NO. 9355.3-01.
13. Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potential Responsible Parties, U.S. EPA Office of Emergency and Remedial Response, EPA/540/G-90/001, April 1990.
14. Guidance on Expediting Remedial Design and Remedial Actions, EPA/540/G-90/006, August 1990.
15. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites, U.S. EPA Office of Emergency and Remedial Response (DRAFT), OSWER Directive No. 9283.1-2.
16. Guide for Conducting Treatability Studies Under CERCLA, U.S. EPA, Office of Emergency and Remedial Response, Prepublication version.
17. Guide to Management of Investigation-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-03FS, January 1992.
18. Health and Safety Requirements of Employees Employed in Field Activities, U.S. EPA, Office of Emergency and Remedial Response, July 12, 1982, EPA Order No. 1440.2.
19. Interim Guidance on Compliance with Applicable of Relevant and Appropriate Requirements, U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
20. Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.
21. Methods for Evaluating the Attainment of Cleanup Standards: Vol. 1, Soils and Solid Media,

- February 1989, EPA 23/02-89-042; vol. 2, Ground water (Jul 1992).
22. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, Federal Register 40 CFR Part 300, March 8, 1990.
  23. NIOSH Manual of Analytical Methods, 2nd edition. Volumes I-VII for the 3rd edition, Volumes I and II, National Institute of Occupational Safety and Health.
  24. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, National Institute of Occupational Safety and Health/Occupational Health and Safety Administration/United States Coast Guard/Environmental Protection Agency, October 1985.
  25. Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, February 19, 1992, OSWER Directive 9355.7-03.
  26. Procedure for Planning and Implementing Off-Site Response Actions, Federal Register, Volume 50, Number 214, November 1985, pages 45933-45937.
  27. Procedures for Completion and Deletion of NPL Sites, U.S. EPA, Office of Emergency and Remedial Response, April 1989, OSWER Directive No. 9320.2-3A.
  28. EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, March 2001.
  29. Guidance for Quality Assurance Project Plans, EPA QA/G-5, December 2002.
  30. Data Quality Objective Process for Hazardous Waste Site Investigations, EPA QA/G-4HW, January 2000.
  31. Contract Laboratory Program Guidance for Field Samplers, August 2004.

2/22/2007

## Independent Government Cost Estimate for RD Oversight

Contractor: RAC 2 - SulTRAC					IGCE Minimum	IGCE Maximum
Project Title: North Bronson Industrial Area		Option Period March 2011				
Location: Bronson, Michigan						
Work Assignment: 121-ROBE-051C						
	Percent	Est. Hours	Rate	Direct Cost		
Professional Level 4	15.8%	219	\$48.79	\$10,685		
Professional Level 3	41.4%	576	\$32.37	\$18,645		
Professional Level 2	42.8%	595	\$25.03	\$14,893		
Professional Level 1	0.0%	0	\$18.53	\$0		
Clerical % of LOE	12%	167	\$18.75	\$3,128		
ODC %	8%	Total Direct Labor		\$47,350	\$37,880	\$56,821
Other ODC:	\$0.00	Other ODC:	\$0.00 /LOE	\$3,788	\$3,030	\$4,546
Subcontract(s)	\$0.00	SubKt Srch	0.00%	\$0	\$0	\$0
Travel				\$5,855	\$4,684	\$7,025
Fringes	41.80%			\$19,793	\$15,834	\$23,751
Indirect	51.50%			\$24,385	\$19,508	\$29,263
Subtotal			Subkt	\$101,171	\$80,937	\$121,405
G & A	10.40%		10.40%	\$10,522	\$8,417	\$12,626
Base Fee	5.00%		1.00%	\$5,585	\$4,468	\$6,702
Award Fee	5.00%		4.00%	\$5,585	\$4,468	\$6,702
Estimate of LOE & Dollars			1390	\$122,862	\$98,290	\$147,434
Previously Approved LOE & Dollars			0	\$0	\$0	\$0
Total LOE & Dollar Estimate:			1,390	\$122,862	\$98,290	\$147,434
New Work LOE Maximum:			1,112			
New Work LOE Maximum:			1,668			

WAM: Terese VanDonsel

PO / IGCE Coordinator Concurrence: Pankaj Parikh

**\*\* CONFIDENTIAL - FOR AGENCY USE ONLY \*\***

LOE for RD Oversight															
WBS Number	Task	Total	LOE					MIN LOE	MAX LOE	Direct					Totals by Task
			P4	P3	P2	P1	C			Labor (\$)	Travel	Subcontract Costs	ODC's	Indirects & Fees	Task Grand Total
1.0	Project Planning & Management	609	205	307	97	0	73	487	731	\$23,738	\$158		\$1,899	\$32,426	\$58,220
1.1	Project Planning	107	22	85	20	0	13	86	128	\$3,919	\$0		\$314	\$5,348	\$9,580
1.1	Attend Kickoff Meeting	6	3	3	0	0	1	5	7	\$257	\$0		\$21	\$351	\$628
1.1	Review Background Documents	20	0	20	0	0	2	16	24	\$682	\$0		\$55	\$945	\$1,693
1.1	Conduct Site Visit	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.1	Prepare RDO Work Plan	50	10	30	10	0	6	40	60	\$1,822	\$0		\$146	\$2,486	\$4,454
1.1	Attend Fact Finding/Neg Mtg	4	2	2	0	0	0	3	5	\$171	\$0		\$14	\$234	\$419
1.1	Prepare RDO Work Plan Revision	25	5	10	10	0	3	20	30	\$874	\$0		\$70	\$1,193	\$2,137
1.1	Prepare and Submit COI Disclosure	2	2	0	0	0	0	2	2	\$102	\$0		\$8	\$139	\$250
1.2	Review PRP Plans	110	6	52	52	0	13	88	132	\$3,525	\$0		\$282	\$4,810	\$8,617
1.2	Review PRP Work Plans	42	2	20	20	0	5	34	50	\$1,340	\$0		\$107	\$1,829	\$3,276
1.2	Review PRP HASP	22	2	10	10	0	3	18	28	\$721	\$0		\$58	\$984	\$1,763
1.2	Review PRP QAPP	4	0	2	2	0	0	3	5	\$124	\$0		\$10	\$169	\$303
1.2	Review PRP FSP	21	1	10	10	0	3	17	25	\$670	\$0		\$54	\$914	\$1,638
1.2	Other PRP Plans	21	1	10	10	0	3	17	25	\$670	\$0		\$54	\$914	\$1,638
1.3	Preparation of Site-Specific Plans	32	2	10	20	0	4	26	38	\$994	\$0		\$80	\$1,356	\$2,430
1.3	Site Management Plan	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.3	Field Sampling Plan	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.3	QAPP	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.3	Data Management Plan	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.3	HASP	32	2	10	20	0	4	26	38	\$994	\$0		\$80	\$1,356	\$2,430
1.4	Pollution Liability Insurance	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.5	Project Management & Reporting	360	175	180	5	0	43	288	432	\$15,300	\$0		\$1,224	\$20,878	\$37,402
1.5	Monthly Management & Reporting	350	175	175	0	0	42	280	420	\$14,991	\$0		\$1,199	\$20,456	\$36,646
1.5	Meetings	10	0	5	5	0	1	8	12	\$310	\$0		\$25	\$422	\$757
1.5	Audits	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.5	Training	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.6	Subcontractor Procurement & Mgmt	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.6	Procurement	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.6	Monthly Management & Reporting	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
2.0	CR Technical Support	24	0	24	0	0	3	19	29	\$831	\$633		\$68	\$1,270	\$2,800
3.0	Data Acquisition/RD Oversight	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
3.0	Split Sampling	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
3.0	Quarterly Split Sampling	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
3.0	Sampling Reports	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
4.0	Analysis of Split Samples	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0
5.0	Analytical Support & Data Validation	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Prepare & Ship Samples	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Coordinate w/Appropriate Sample Team	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Develop Data Quality Objectives	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Implement USEPA Approved QA Program	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Provide Sample Management	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Review Data Against validation criteria	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Perform Data Validation	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
5.0	Prepare Data Validation Report	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
3.0	Reuse Planning	40	0	10	30	0	5	32	48	\$1,165	\$0		\$83	\$1,589	\$2,847
7.0	Data Evaluation	0	0	0	0	0	0	0	0	\$0	\$0		\$0	\$0	\$0
1.0	Review PRP Design Documents	349	9	160	180	0	42	279	419	\$10,909	\$0		\$873	\$14,886	\$26,668
1.0	Review PRP PRE-Design Documents	38	1	15	20	0	4	29	43	\$1,118	\$0		\$89	\$1,523	\$2,728
1.0	Review Preliminary Design	38	1	15	20	0	4	29	43	\$1,118	\$0		\$89	\$1,523	\$2,728
1.0	Review Intermediate Design	51	1	20	30	0	6	41	61	\$1,562	\$0		\$125	\$2,131	\$3,818
1.0	Review PreFinal Design	62	2	30	30	0	7	50	74	\$1,959	\$0		\$157	\$2,673	\$4,789
1.0	Review Final Design	62	2	30	30	0	7	50	74	\$1,959	\$0		\$157	\$2,673	\$4,789

8.0	Subcontract Award Documents	21	1	10	10	0	3	17	25	\$670	\$0	\$54	\$914	\$1,638	
8.0	Other Non-Specific RA Documents	81	1	40	40	0	10	65	97	\$2,527	\$0	\$202	\$3,448	\$6,178	
9.0	Pre-design/Treatability Study Oversight	252	0	12	240	0	30	202	302	\$6,963	\$4,434	\$557	\$10,452	\$22,405	\$22,405
							0	0	0	\$0		\$0	#VALUE!	#VALUE!	
10.0	Technical Meeting Support	96	0	48	48	0	12	77	115	\$2,971	\$630	\$238	\$4,190	\$8,028	\$8,028
							0	0	0	\$0		\$0	#VALUE!	#VALUE!	
11.0	Closeout WA	20	5	15	0	0	2	16	24	\$775	\$0	\$62	\$1,057	\$1,893	\$1,893
11.0	Package & Return Documents	10	0	10	0	0	1	8	12	\$346	\$0	\$28	\$472	\$846	
11.0	Prepare Closeout Report	10	5	5	0	0	1	8	12	\$428	\$0	\$34	\$584	\$1,047	
											\$5,855				

## TASK ASSUMPTIONS

## ASSUMPTIONS

Assume Fact Finding Meeting can be handled under a short conf call

Preparation of HASP - Assume one HASP (although may be able to combine with other NBFF work assignment)

Monthly management and reporting - assume 10 hrs/month and P3 project manager From February 2007 through December 2009 = 35 months.

Meeting assumes one meeting, 2 participants, 4 hours, 1 hour prep = 10 hours

CR Technical Support - 2 meetings w/ 1 person - Assume 12 hrs for travel & migs

Field Oversight - 50hrs per week plus travel time = 60 hours

Field Oversight - 2 2-week events using a P2 in the field plus 3 hours/week for site manager for 4 weeks

Task 10 assumes 4 meetings with 2 participants 12 hours/person/meeting = 96 hours

General - Assume all correspondence requires P4 review and signoff - (i.e., why there are a lot of 1 hr P4 hrs)

Travel for RD Oversight		Airfare		Car Rental		Hotel		Per Diem		Total
WBS	Task	#	Unit Price	#	Unit Price	#	Unit Price	#	Unit Price	Travel Costs
Number										
1.0	Project Planning & Management	0	\$2	1	\$99	0	\$2	2	29.25	\$158
1.1	Project Planning									
1.1	Attend Kickoff Meeting	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.1	Review Background Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.1	Conduct Site Visit	0	\$2	0	\$0	0	\$0	0	\$0	\$0
1.1	Prepare RDO Work Plan	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.1	Attend Fact Finding/Neg Mtg	0	\$2	0	\$0	0	\$2	0	\$2	\$0
1.1	Prepare RDO Work Plan Revision	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.1	Prepare and Submit COI Disclosure	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.2	Review PRP Plans									
1.2	Review PRP Work Plans	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.2	Review PRP HASP	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.2	Review PRP QAPP	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.2	Review PRP FSP	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.2	Other PRP Plans	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.3	Preparation of Site-Specific Plans									
1.3	Site Management Plan	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.3	Field Sampling Plan	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.3	QAPP	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.3	Data Management Plan	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.3	HASP	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.4	Pollution Liability Insurance	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.5	Project Management & Reporting									
1.5	Monthly Management & Reporting	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.5	Meetings	0	\$2	0	\$0	0	\$0	0	\$2	\$0
1.5	Audits	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.5	Training	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.6	Subcontractor Procurement & Mgmt									
1.6	Procurement	0	\$2	0	\$2	0	\$2	0	\$2	\$0
1.6	Monthly Management & Reporting	0	\$2	0	\$2	0	\$2	0	\$2	\$0
2.0	CR Technical Support	0	\$2	4	\$99	2	\$60	4	29.25	\$633
3.0	Data Acquisition/RD Oversight	0	\$2	0	\$2	0	\$2	0	\$2	\$0
3.0	Split Sampling	0	\$2	0	\$2	0	\$2	0	\$2	\$0
3.0	Quarterly Split Sampling	0	\$2	0	\$2	0	\$2	0	\$2	\$0
3.0	Sampling Reports	0	\$2	0	\$2	0	\$2	0	\$2	\$0
4.0	Analysis of Split Samples	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Analytical Support & Data Validation	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Prepare & Ship Samples	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Coordinate w/Appropriate Sample Team	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Develop Data Quality Objectives	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Implement USEPA Approved QA Program	0	\$2	0	\$2	0	\$2	0	\$2	\$0



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5.0	Provide Sample Management	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Review Data Aagainst validation criteria	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Perform Data Validation	0	\$2	0	\$2	0	\$2	0	\$2	\$0
5.0	Prepare Data Validation Report	0	\$2	0	\$2	0	\$2	0	\$2	\$0
6.0	Reuse Planning	0	\$2	0	\$2	0	\$2	0	\$2	\$0
7.0	Data Evaluation	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review PRP Pre-Design Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review PRP PRE-Design Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review Preliminary Design	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review Intermediate Design	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review PreFinal Design	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Review Final Design	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Subcontract Award Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
8.0	Other Non-Specific RD Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
9.0	Pre-design/Treatability Study Oversight	0	\$2	24	\$99	20	\$60	4	214.50	\$4,434
10.0	Technical Meeting Support	0	\$2	4	\$99	0	\$60	8	29.25	\$630
11.0	Closeout WA	0	\$2	0	\$2	0	\$2	0	\$2	\$0
11.0	Package & Return Documents	0	\$2	0	\$2	0	\$2	0	\$2	\$0
11.0	Prepare Closeout Report	0	\$2	0	\$2	0	\$2	0	\$2	\$0

#### TRAVEL ASSUMPTIONS

Assume kickoff meeting does not require travel - in town or via conf call

Task 1 meeting assumes 1 day car rental with 3/4 per diem/person for 2 persons. Assume traveling together. Site visit under NBFF WA

Task 2 assumes 2 meetings attended by one person. Assume 2-day car rental/meeting, 1 hotel stay/meeting and 3/4per diem/ for boths days for each meeting

Task 9 assumes 4 weeks of oversight by one person. For per diem, assume 4 days at full per diem and 2 days at 75%.  $(4 \times 39) + (2 \times .75 \times 39) = 214.50$

Task 9 assumes 6 day car rental for 4 weeks, 5 days/week hotel for 4 weeks.

Task 10 assumes 2 participants, 4 meetings, participants drive together, 3/4 per diem/person/day/meeting

For each week of oversight - assume 5 nights in hotel (Sun through Friday)

Car rental - \$99/day. For a week (actually 5 1/2 days), assume  $6 \times \$99 = \$594$